



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/806,296
Applicant : Jaime A. Rabi
Filed : March 22, 2004
T.C./A.U. : 1623
Examiner : Ganapathy Krishnan

Docket No. : 06171.105107 (IDX 1012 C)
Customer No. : 20786

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 17, 2006

Information Disclosure Statement

Sir:

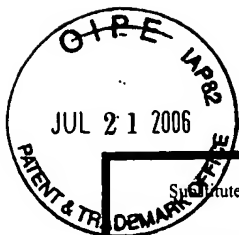
Pursuant to the duty of disclosure under 37 CFR §§ 1.56, 1.97 and 1.98, Applicants cite the publications listed on the accompanying PTO-1449. The citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under the applicable statutes, Rules of Practice in patent cases, or otherwise.

Although no fee is believed due, the Commissioner is hereby authorized to charge any deficiency associated with this paper to Deposit Account No. 11-0980.

KING & SPALDING
1180 Peachtree Street
Atlanta, Georgia 30309-3521
404-572-3541 (Telephone)
404-572-5134 (Facsimile)

Respectfully submitted,

Sherry M. Knowles
Sherry M. Knowles 36,174
Sherry M. Knowles
Registration No. 33,052



Supplement to form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **1** of **3****Complete if Known**

Application Number	10/806,296
Filing Date	March 22, 2004
First Named Inventor	Rabi, J.A.
Group Art Unit	1623
Examiner Name	Ganapathy Krishnan
Attorney Docket Number	06171.105107 IDX 1012C

3478701 2.DOC 1

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear
		Number	Kind Code (if known)			
	AA	3,891,623	A	Vorbruggen <i>et al.</i>	06-24-1975	
	AB	4,754,026	A	Kawada <i>et al.</i>	06-28-1988	
	AC	4,957,924	A	Beauchamp	09-18-1990	
	AD	5,144,018	A	Kuzuhara <i>et al.</i>	09-01-1992	
	AE	5,565,438	A	Chu <i>et al.</i>	10-15-1996	
	AF	5,567,688	A	Chu <i>et al.</i>	10-23-1996	
	AG	5,587,362	A	Chu <i>et al.</i>	12-24-1996	
	AH	6,153,594	A	Børretzen <i>et al.</i>	11-28-2000	
	AI	6,248,878	B1	Matulic-Adamic <i>et al.</i>	06-19-2001	
	AJ	6,271,212	B1	Chu <i>et al.</i>	08-07-2001	
	AK	6,395,716	B1	Gosselin <i>et al.</i>	05-28-2002	
	AL	6,444,652	B1	Gosselin <i>et al.</i>	09-03-2002	
	AM	2003-0050229	A1	Sommadossi <i>et al.</i>	03-13-2003	
	AN	6,566,344	B1	Gosselin <i>et al.</i>	05-20-2003	
	AO	6,569,837	B1	Gosselin <i>et al.</i>	05-27-2003	
	AP	2003-0083306	A1	Imbach <i>et al.</i>	05-01-2003	
	AQ	2004-0006002	A1	Sommadossi <i>et al.</i>	01-08-2004	
		2005/0020825		Storer <i>et al.</i>	01-27-2005	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	T ⁶
		Office ³	Number	Kind Code ² (if known)				
	AR	DD	0,140,254	Z	Akad. Wissenschaft der DDR Zentralinstitut für Molekularbiologie	02-20-1980		
	AS	DE	42 24 737	A1	Prof. Dr. Herbert Schott	02-03-1994	with English abstract	
	AT	EP	0 352 248	A1	Johansson <i>et al.</i>	01-24-1990		
	AU	JP	62-93645	A	Jpn. Kokai Tokkyo Koho	10-21-1994	machine translation	
	AV	JP	07224081	A2	Kobayashi Perfumery Co.	08-22-1995	English translation	
	AW	JP	2000290289	A2	Mitsui Chemicals Inc.	10-17-2000	English translation	
	AX	WO	95/07287	A1	CNRS	03-16-1995		
	AY	WO	96/11204	A1	Max Delbrück Centr. Mol. Med.	04-18-1996	with English abstract	
	AZ	WO	96/13512	A2	Genencor Int'l; Lipitek	05-09-1996		
	AAA	WO	96/40164	A1	Emory U.; UAB Res.Found.; CNRS	12-19-1996		

3478701

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

2

of

3

Complete if Known

Application Number	10/806,296
Filing Date	March 22, 2004
First Named Inventor	Rabi, J.A.
Group Art Unit	1623
Examiner Name	Ganapathy Krishnan
Attorney Docket Number	06171.105107 IDX 1012C

3478701 2.DOC

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document Office ³ Number Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	T ⁶
	BA	WO 00/09531 A2	Novirio Pharm.; CNRS	02-24-2000		
	BB	WO 01/90121 A2	Novirio; Univ.... Cagliari	11-29-2000		
	BC	WO 01/96353 A2	Novirio Pharm.; C.N.R.S.	21-20-2001		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	BD	BENZARIA, S., <i>et al.</i> , "Synthesis of potential prodrugs of b-4-L-dC, a potent and selective anti-HBV agent," <i>Antiviral Res.</i> , 50:A79 (2001). [Abstract no. 137].	
	BE	BLOCH, A., <i>et al.</i> , "The Role Of The 5'-Hydroxyl Group Of Adenosine In Determining Substrate Specificity For Adenosine Deaminase," <i>J. Med. Chem.</i> , 10(5):908-12 (September 1967).	
	BF	BRYANT, M.L., <i>et al.</i> , "Antiviral L-nucleosides specific for hepatitis B virus infection," <i>Antimicrob. Agents Chemother.</i> , 45(1):229-235 (January 2001).	
	BG	BUDAVARI, <i>et al.</i> , Eds., <i>The Merck Index</i> , 12th Edition, Entry no. 10039, p. 10044.	
	BH	CAVELIER, F., <i>et al.</i> , "Studies of selective Boc removal in the presence of silyl ethers," <i>Tetrahedron Letters</i> , 37:5131-5134 (1996).	
	BI	CRETTON-SCOTT, E., <i>et al.</i> , "Pharmacokinetics of β -L-2'-deoxycytidine prodrugs in monkeys," <i>Antiviral Res.</i> , 50:A44 (2001) [Abstract no. 16].	
	BJ	DAVISSON, V.J., <i>et al.</i> , "Synthesis of Nucleotide 5'-Diphosphates from 5'-O-Tosyl Nucleosides," <i>J. Org. Chem.</i> , 52(9):1794-1801 (1987).	
	BK	FOX, J.J., <i>et al.</i> , "Thiolation of nucleosides. II. Synthesis of 5-methyl-2'-deoxycytidine and related pyrimidine nucleosides," <i>J. Am. Chem. Soc.</i> , 81:178-187 (1959).	
	BL	HOARD, D.E., <i>et al.</i> , "Conversion of Mono- and Oligodeoxyribonucleotides to 5'-Triphosphates," <i>J. Am. Chem. Soc.</i> , 87(8):1785-1788 (April 20, 1965).	
	BM	HOLY, A., "Nucleic Acid Components and Their Analogs. CLIII. Preparation of 2'-deoxy-L-Ribonucleosides of the Pyrimidine Series," <i>Collect. Czech. Chem. Commun.</i> , 37(12):4072-4087 (1972).	
	BN	HUBBARD, A.J. <i>et al.</i> , "An Investigation by 1H NMR Spectroscopy Into the Factors Determining the β : α Ratio of the Product in 2'-Deoxynucleoside Synthesis," <i>Nucleic Acids Research</i> , 12(7): 6827-6837(1984)	
	BO	IMAI, K., <i>et al.</i> , "Studies on Phosphorylation. IV. Selective Phosphorylation of the Primary Hydroxyl Group in Nucleosides," <i>J. Org. Chem.</i> , 34(6):1547-1550 (June 1969).	
	BP	KANEKO, M., <i>et al.</i> , "A convenient synthesis of cytosine nucleosides," <i>Chem. Pharm. Bull.</i> , 20:1050-1053 (1972).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 3

Complete if Known

Application Number	10/806,296
Filing Date	March 22, 2004
First Named Inventor	Rabi, J.A.
Group Art Unit	1623
Examiner Name	Ganapathy Krishnan
Attorney Docket Number	06171.105107 IDX 1012C

3478701_2.DOC

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	CA	KERR, S.G., <i>et al.</i> , "N4-(dialkylamino)methylene derivatives of 2'-deoxycytidine and arabinocytidine: physicochemical studies for potential prodrug applications," <i>J. Pharm. Sci.</i> , 83(4):582-586 (April 1994).	
	CB	LIN, T.-S., <i>et al.</i> , "Synthesis of Several Pyrimidine L-Nucleoside Analogues as Potential Antiviral Agents," <i>Tetrahedron Letters</i> , 51(4):1055-1068 (1995).	
	CC	LUH, T.-Y., <i>et al.</i> , "A convenient method for the selective esterification of amino-alcohols," <i>Synthetic Communications</i> , 8(5):327-333 (1978).	
	CD	MAGA, Giovanni, <i>et al.</i> , "Lack of stereospecificity of suid pseudorabies virus thymidine kinase," <i>Biochem. J.</i> , 294(2):381-385 (1993).	
	CE	McCORMICK, J., <i>et al.</i> , "Structure and total synthesis of HF-7, a neuroactive glyconucleoside disulfate from the funnel-web spider <i>Hololena curta</i> ," <i>J. Am. Chem. Soc.</i> , 121(24):5661-5664 (1999).	
	CF	PIERRA, C., <i>et al.</i> , "Comparative studies of selected potential prodrugs of β -L-dC, a potent and selective anti-HBV agent," <i>Antiviral Res.</i> , 50:A79 (2001). [Abstract no. 138].	
	CG	STANDRING, D.N., <i>et al.</i> , "Antiviral beta-L-nucleosides specific for hepatitis B virus infection," <i>Antiviral Chem. & Chemother.</i> , 12 (Suppl. 1):119-129 (2001).	
	CH	TANG, X.-Q., <i>et al.</i> , "2'-C-Branched ribonucleosides: Synthesis of the phosphoramidite derivatives of 2'-C-b-methylcytidine and their incorporation into oligonucleotides," <i>J. Org. Chem.</i> , 64(3):747-754 (1999).	
	CI	TYRSTED, G., <i>et al.</i> , "Inhibition of the synthesis of 5-phosphoribosyl-1-pyrophosphate by 3'-deoxy-adenosine and structurally related nucleoside analogs," <i>Biochim. Biophys. Acta.</i> , 155(2):619-622 (February 26, 1968).	
	CJ	VERRI, A., <i>et al.</i> , "Lack of enantiospecificity of human 2'-deoxycytidine kinase: relevance for the activation of β -L-deoxycytidine analogs as antineoplastic and antiviral agents," <i>Molecular Pharmacology</i> , 51(1):132-138 (January 1997).	
	CK	VERRI, A., <i>et al.</i> , "Relaxed Enantioselectivity of Human Mitochondrial Thymidine Kinase and Chemotherapeutic Uses of L-Nucleoside Analogues," <i>Biochem. J.</i> , 328(1):317-320 (November 15, 1997).	
	CL	Von JANTA-LIPINSKI, M., <i>et al.</i> , "Newly Synthesized L-Enantiomers of 3'-Fluoro-Modified β -2'-Deoxyribonucleoside 5'-Triphosphates Inhibit Hepatitis B DNA Polymerase but not the Five Cellular DNA Polymerases α , β , γ , δ , and ϵ Nor HIV-1 Reverse Transcriptase," <i>J. Medicinal Chemistry</i> , 41(12):2040-2046 (May 21, 1998).	
	CM	ZEDECK, M.S., <i>et al.</i> , "Inhibition of the steroid-induced synthesis of D5-3-ketosteroid isomerase in <i>Pseudomonas testosterone</i> by a new purine deoxyribonucleoside analog: 6-chloro-8-aza-9-cyclopentylpurine," <i>Mol. Pharmacol.</i> , 3(4):386-395 (1967).	
	CN	ZHANG, W., <i>et al.</i> , "Removal of silyl protecting groups from hydroxyl functions with ammonium fluoride in methanol," <i>Tetrahedron Letters</i> , 33:1177-1180 (1992).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.